CITRUS ADVANCED TECHNOLOGY PROGRAM

QUARTERLY & FINAL PROGRESS REPORT FORM: Control of Citrus Greening, Canker & Emerging Diseases of Citrus

▶ SELECT PERIOD April 2020

(●) *Quarterly Report* ( ) *Final*

Proposal Title

Characterizing HLB-pH interaction to improve management of root function and tree health

Today's Date	Sponsoring Organization (drop-down)	Category (drop down)
06/11/2020	Citrus Research and Development Foundation	Horticultural & Management

ABSTRACT (750-word Executive Summary-public report-do not disclose proprietary information or intellectual property)

The objectives of this study are to identify optimal pH range for root function and minimize root turnover on HLB-affected rootstocks and how uneven pH levels in the root zone (e.g. irrigated vs. row middle portions of root system) affect the overall health of the tree. This is being done in a split root system in the greenhouse where pH of different parts of the root system can be controlled an maintained.

The following progress reported is based on a April 30th report date.

Modified pH irrigation and image collection and analysis continued through the COVID-19 research pause, but further sampling and testing was delayed as well as the setup of the second experiment. This pause did allow for root tracing of a backlog of images that was created by the longer than expected time for CLas infection of the inoculated trees. As research resumes we will initiate the second experiment and perform final sampling and breakdown of the first experiment.

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Organization University of Florida, CREC

Sponsor Project Number 18-041C

Project Duration (years 2 *Year of Project* 2

% Completion of Objectives 65.00%

CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.